



UNITED STATES PATENT AND TRADEMARK OFFICE

A-T

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,895	07/24/2003	Toshiya Uemura	PTGF-03043 HIR.072	1190
21254	7590	01/11/2005		EXAMINER
MCGINN & GIBB, PLLC				NADAV, ORI
8321 OLD COURTHOUSE ROAD				
SUITE 200			ART UNIT	PAPER NUMBER
VIENNA, VA 22182-3817			2811	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/625,895	UEMURA, TOSHIYA
	Examiner	Art Unit
	ori nadav	2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 - 4a) Of the above claim(s) 5-19 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 July 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/24/03, 10/27/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the embodiment of figures 1-3 in the reply filed on 10/25/2004 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation of a nitride semiconductor, as recited in claim 1, is unclear as to which material is nitride semiconducot.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, insofar as in compliance with 35 U.S.C. 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaskie et al. (5,698,941) in view of Kimura et al. (6,195,196) and Suehiro et al. (Jp 2001-217466).

Jaskie et al. teach in figure 16 and related text a light emitting apparatus, comprising:

a light emitting element of semiconductor;

a phosphor 808, 810 that absorbs light emitted from said light emitting element

and emits light with a wavelength different from that of the absorbed light;

a first reflection mirror 824 (the left mirror) that reflects the light emitted from said light emitting element to converge the light;

a second reflection mirror 824 that has a light passing hole (the hole between the second and third mirrors 824) at a position on which the light reflected on said first reflection mirror is converged and that has a reflection surface on the side opposite to the side facing said first reflection mirror; and

a phosphor layer 808, 810 that includes said phosphor, said phosphor layer being placed over said light passing hole (see figure 1, the device can be placed in the direction as depicted in figure 16, or in an opposite direction) and at a specific region that part of light passing through said light passing hole is radiated.

Jaskie et al. do not teach a light emitting element of nitride semiconductor and a phosphor layer being placed in transparent resin.

Kimura et al. teach a nitride semiconductor.

Suehiro et al. teach a phosphor layer being placed in transparent resin.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a light emitting element of nitride semiconductor and to place the phosphor layer in transparent resin in Kimura et al.'s device in order to

Art Unit: 2811

simplify the processing steps of making the device by using conventional light emitting element and in order to protect the phosphor layer, respectively.

Note that the broad recitation of the claim does not require the second reflection mirror to be located above the first reflection mirror:

Regarding claims 2-4, Kimura et al. teach a first reflection mirror has a ring-shaped concave (see figure 18) to converge the light and said light passing hole has a shape such that the light reflected on the ring-shaped concave is converged while having a ring shape, wherein

 said phosphor layer has a thickness in the light emission direction, said thickness being capable of being adjusted according to the color of light to be extracted from said light emitting apparatus, and wherein

 said phosphor layer includes said phosphor the concentration of which is capable of being adjusted according to the color of light to be extracted from said light emitting apparatus.

Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722

Art Unit: 2811

and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(571) 272-1660**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**



O.N.
1/6/05

ORI NADAV
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800